

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) A method, comprising:
sending power to at least one radio frequency identification (RFID) transponder (tag), including:
sending power P_j for a first time interval t_j at a first frequency f_j chosen from a list of N frequencies $f_1, f_2, f_3, \dots, f_N$, and
sending power P_{j+1} for a time interval t_{j+1} at a second frequency f_{j+1} chosen from the list of N frequencies,
wherein the time interval t_j ends prematurely if none of said at least one tag responds, and the power P_{j+1} for the time interval t_{j+1} is subsequently sent;
wherein the corresponding frequencies f_j and f_{j+1} are different frequencies, and
wherein a time between sending power P_j and P_{j+1} is less than a time t_0 in which the at least one tag loses a particular tag function if no power is sent to the tag.
2. (Previously Presented) The method of claim 1, wherein t_{j+1} is chosen to be long enough that all tags in operative communication with the base station at frequency f_{j+1} have identified themselves.
3. (Previously Presented) The method of claim 1, wherein the sending of power P_{j+1} is stopped after the time interval t_{j+1} when no further tags identify themselves.
4. (Previously Presented) The method of claim 1, wherein P_j and P_{j+1} are different powers.

5. (Previously Presented) The method claim 4, wherein P_{j+1} is reduced from P_j when t_j is too short a time for all tags in operative communication with the base station to have identified themselves.
6. (Original) The method of claim 1, wherein $|t_{j+1} - t_j| > 0.05 (t_j + t_{j+1})$.
7. (Original) The method of claim 6, wherein $|t_{j+1} - t_j| > 0.1 (t_j + t_{j+1})$.
8. (Original) The method of claim 7, wherein $|t_{j+1} - t_j| > .3 (t_j + t_{j+1})$.
9. (Original) The method of claim 1, wherein P_j is a function of time.
10. (Original) The method of claim 9, wherein P_j is a monotonically increasing function of time.
11. (Previously Presented) The method of claim 10, wherein P_j is increased when no further tags identify themselves.
12. (Previously Presented) A method of frequency hopping, comprising:
sending a first power at a first frequency to a plurality of tags during a first time interval having a first length;
receiving responses from the plurality of tags; and
prematurely ending the first time interval in which the first power is sent and subsequently sending a second power at a second frequency to the plurality of tags if a time between received responses exceeds a response time sufficient to enable at least one of the plurality of tags to respond, the first frequency of the first power being different from the second frequency of the second power.

13. (Previously Presented) The method of claim 12, wherein the response time is less than a flag reset time t_0 of a tag of the plurality of tags.

14. (Previously Presented) The method of claim 12, wherein the response time is less than a tag power down time.

15. (Previously Presented) The method of claim 12, wherein the response time is less than 20 milliseconds.

16. (Canceled)

17. (Previously Presented) The method of claim 12, further comprising sending the second power at the second frequency to the plurality of tags when a total time of sending the first power at the first frequency exceeds a protocol time limit t_{\max} .

18. (Previously Presented) A RFID system, comprising:
at least a first antenna; and
a base station communicatively coupled to at least the first antenna and operable to:

send a first power at a first frequency to a plurality of tags during a first time interval having a first length,
receive responses from the plurality of tags, and
prematurely end the first time interval in which the first power is sent and subsequently send a second power at a second frequency to the plurality of tags if a time between received responses exceeds a response time sufficient to enable at least one of the plurality of tags to respond, the first frequency of the first power being different from the second frequency of the second power.

19. (Previously Presented) A RFID system, comprising:

a plurality of tags; and

a base station operable to send a first power at a first frequency to the plurality of tags during a first time interval having a first length, receive responses from the plurality of tags, and prematurely end the first time interval in which the first power is sent and subsequently send a second power at a second frequency to the plurality of tags if a time between received responses exceeds a response time sufficient to enable at least one of the plurality of tags to respond, the first frequency of the first power being different from the second frequency of the second power.

20. (Previously Presented) The system of claim 19, wherein the first length of the first time interval in which the first power is sent is greater than a second length of a second time interval in which the second power is sent.

21. (Previously Presented) A RFID system, comprising:

means for sending a first power at a first frequency to a plurality of tags during a first time interval having a first length; and

means for receiving responses from the plurality of tags; and

the means for sending further prematurely ending the first time interval in which the first power is sent and subsequently sending a second power at a second frequency to the plurality of tags if a time between received responses exceeds a response time sufficient to enable at least one of the plurality of tags to respond, the first frequency of the first power being different from the second frequency of the second power.

22. (Previously Presented) The system of claim 21 wherein the first length of the first time interval in which the first power is sent is greater than a second length of a second time interval in which the second power is sent.

23-27. (Canceled)

28. (Previously Presented) The method of claim 1 wherein the first frequency f_j and the second frequency f_{j+1} are different frequencies in a same frequency band.

29. (Previously Presented) The method of claim 12 wherein the first and second frequencies are different frequencies in a same frequency band.

30. (Previously Presented) The system of claim 18 wherein the first and second frequencies are different frequencies in a same frequency band.

31. (Previously Presented) The system of claim 19 wherein the first and second frequencies are different frequencies in a same frequency band.

32. (Previously Presented) The system of claim 21 wherein the first and second frequencies are different frequencies in a same frequency band.

33. (Currently Amended) A method, comprising:
 sending power to at least one radio frequency identification (RFID) transponder (tag), including:
 sending power P_j for a first time interval t_j at a first frequency f_j chosen from a list of N frequencies $f_1, f_j, f_{j+1}, \dots, f_N$;
 reducing power P_j to a level P_{j+1} , $P_j > P_{j+1}$, for a rest of the first time interval t_j if a number of responded tags is more than some particular number, so as to reduce said number of responded tags that are in communication; and
 sending power P_{j+1} for a time interval t_{j+1} at a second frequency f_{j+1} chosen from the list of N frequencies,
 wherein the frequencies f_j and f_{j+1} are different frequencies, and
 wherein a time between sending power P_j and P_{j+1} is less than a time t_0 in which the at least one tag loses a particular tag function if no power is sent to the tag.

34. (Currently Amended) The method of claim 33 wherein the first and second frequencies are different frequencies in a same frequency band.

35. (New) The system of claim 19 wherein a second length of a second time interval, in which the second power at the second frequency is subsequently sent, is longer than the first length of the first time interval, in which the first power at the first frequency is sent.

36. (New) The method of claim 1 wherein said powers P_j and P_{j+1} have increasing stairstep power levels and are of different time durations.